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ABSTRACT

The first aim of this study is to see whether high dogmatic and field dependent measures, taken together, are related to being liked by others in a teaching situation. The second aim is to develop a reliable sociometric measure of peer judgement that would tap the interpersonal domain within the context of professional duties. The Hidden Figures Test (Jackson, Messick and Myers, 1964) and the Dogmatism Scale (Rokeach, 1960) were administered to 50 master degree candidates for an intern training program for teachers of emotionally disturbed children. After one semester, sociometric data was collected. Results show that field-independence and dogmatism, when considered in concert, provide useful information concerning those teachers who are viewed positively by their peers. Interns with the particular combination of high dogmatism-field dependent scores were chosen less frequently by their peers, while those who scored low dogmatism-field dependent were chosen more often. (Author/RWP)

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PEER JUDGEMENTS OF TEACHING COMPETENCE AS A FUNCTION OF FIELD-INDEPENDENCE AND DOGMATISM

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In recent years, considerable attention has been paid to the effect of cognitive styles on teacher's behavior and attitude characteristics. Witkin (1962) and his collegues have described a dimension which they call field-independence. This variable differentiates individuals in terms of their active striving, analytic attitude, and degree of self awareness.

In terms of interpersonal functioning Witkin (1965) states that, "persons with a global cognitive style (field-dependent) manifests itself in reliance on external sources for definition of their attitudes, judgements, sentiments, and of their view of themselves". Rokeach (1960) describes another dimension of cognitive style which is related to a person's openness to new ideas.

Dogmatism and field-independence have both been seen as important constructs in teachers' interpersonal functioning. Measures of dogmatism and field-independence share little variance with each other and display very low correlations with measures which purportedly assess open, other centered attitudes and behavior. Clearly the views of those who define interpersonal functioning in terms of relative isomorphism between interpersonal openness and such constructs as dogmatism and/or field-independence are overly simplistic.

Since field independence and dogmatism are essentially uncorrelated it is possible to identify individuals representing combinations of levels on both constructs. Several studies employing this paradigm have found that it is the high dogmatic-field dependent group which tends to be different

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from the other three groups (Ohnmacht, 1966; Ohnmacht, 1967, 1968; Ohnmacht and McMorris, 1971). In these studies the high dogmatic-field dependent person has been found to have difficulty with both reversal and nonreversal shift concept formation problems, score low on inventory scales of predictive surgency or dynamism of classroom teaching behavior, and score lower on a creativity test.

It was the first aim of the study to put the above paradigm to a direct test of whether these two individual difference measures taken together are related to being liked by others in a teaching situation. The first hypothesis was generated from previous empirical work, namely, it is the interaction term of field-independence and dogmatism which is likely to be related to peer judgements of competence. In particular, persons with combinations of field dependent-high dogmatic scores are most likely to receive a lower number of nominations. Also because of their reliance on others for self definition field dependent interns who scored low on dogmatism were predicted to receive a higher number of nominations.

The second aim of the study was to develop a reliable sociometric measure of peer judgement that would tap the interpersonal domain within the context of professional duties.

The program for training teachers of emotionally disturbed children at SUNY-Albany is well suited for gathering the sociometric and individual difference measures. Each teacher-intern works closely for one semester (approximately 15 weeks) with six to eight other interns in one of three settings for emotionally disturbed, neurologically impaired or behaviorally difficult children. The interns share responsibility for program planning, case conferences and the day to day work load. In addition to intense daily work contact, the interns are together during academic course work as well as

formal and informal training seminars. This setting provides an opportunity to see who would come to be the best liked interns in the group.

Subjects

The Ss were 50 master degree candidates for an intern training program for teachers of emotionally disturbed children. All Ss were involved in a pre-selection assessment program and all were enrolled, after selection, in the same internship teaching practicum.

Procedure

During a pre-program assessment all Ss were administered the Hidden Figures Test (HFT), a measure of field independence (Jackson, Messick and Myers, 1964) and the Dogmatism Scale (DS), a measure of open-mindedness or dogmatism (Rokeach, 1960).

After one semester of practical experience each S was asked to nominate other individuals in his work group as his first, second, or third choice as a work partner. Five questions were asked: The person with whom you would prefer to: teach; consult; develop program; talk about personal problems; and take to a party.

The sociometric data were analyzed by forming a correlation matrix and performing a factor analysis using a varimax rotation for the five scores. Two sociometric variables were formed using factor scores (Professional Competence and Interpersonal-Social). The correlation matrix for the five items are presented in Table 1 and the factor loadings are presented in Table 2.

The HFT, DS and peer judgement data were analyzed by using regression analysis (Bracht, 1970; Cohen, 1968). The data were also analyzed by year one (N = 24) and year two, (N = 26).

Results

The correlation matrix for all five variables used in the study are presented in table 3. Only the HFT X DS interaction term yields a statistically significant value ($r = .41$, $P < .01$). The regression analysis yielded a significant effect for the Professional Competence factor as can be seen in Table 4 ($F = 5.09$, $df = 3, 46$, $P < .005$). Consistent with Ohnmacht (1971) effects for field dependence or dogmatism alone did not approach significance. However, HFT X DS interaction term reaches a statistically significant level ($F = 12.53$, $df = 1. 46$, $P < .005$). The Interpersonal-Social factor did not yield even nominal significance levels.

The data were further analyzed by year, since the assessment procedure was being developed during the two years in which these data were being obtained. Year one results are shown in Table 5. The full model effect is significant ($F = 5.14$, $df = 3, 20$, $P < .01$), as well as the main effect for DS ($F = 7.84$, $df = 1, 20$, $P < .025$), and the interaction term HFT X DS ($F = 10.69$, $df = 1, 20$, $P < .005$). The full model results for year two make up Table 6. The full model effect is not significant, nor are the main effects for HFT or DS. However, the interaction term is significant ($F = 4.80$, $df = 1, 22$, $P < .05$). A visual comparison of the interaction effects for each year and the combined groups can be made in Figure 1.

Duncan's multiple range test was used for comparing the means year one and year two combined. The Low HFT-High DS group and the Low HFT-Low DS group were significantly different ($P < .05$). The low dogmatism groups accross different levels of HFT were marginally significantly different ($P < .10$).

DISCUSSION

The present data support the idea that field-independence and dogmatism, when considered in concert, provide useful information concerning which teachers are viewed positively by their peers. Interns with the particular combination of high dogmatism-field dependent scores were chosen less by their peers and those who scored field dependent-low dogmatic were chosen most often.

The HFT and DS means, standard deviations and t-tests for year one and two are shown in Table 7. Both HFT and DS are significantly different, indicating an assessment effect. While this restriction in the sample variance, particularly for DS weakened the strength of the result for year two, the interaction term remains significant, indicating that the paradigm is both theoretically and practically useful.

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Table 1

Correlation Matrix for Five Sociogram Items, N = 50

	1	2	3	4	5
Develop Program	---	.73	.62	.42	.30
Teach		---	.55	.30	.39
Consult			---	.20	.34
Personal Problem				---	
Party					.59

Table 2

Factor Loadings for Five Sociogram Items, N = 50*

	Factor I	Factor II
Develop program	.87	.24
Teach	.84	.23
Consult	.83	.11
Personal Problems	.16	.89
Party	.22	.85

* Factor I accounts for 56% and factor II 21% of the total variance.

Table 3

Martix of Correlations for All Variables
Combined Samples, N = 50

	1	2	3	4	5
Professional Competence	---	-.05	-.13	.18	.41*
Social Interpersonal		----	.03	-.12	-.07
Dogmatism			---	-.15	.19
HFT				----	-.08
Dogmatism X HFT					----

* P < .01

Table 4

Full Model Results for the Criterion
Professional Competence Peer Judgements, N = 50

Predictor	R^2	F	df	Partial R
Dogmatism		2.13 n.s.	1/46	-.21
HFT		2.22 n.s.	1/46	.21
HFT X Dogmatism		12.53**	1/46	.46
Full Model	.25	5.09**	3/46	

**P < .005

Table 5

Year One Sample Full Model Results for the
Criterion Professional Competence Peer Judgements, N = 24

Predictor	R^2	F	df	Partial R
Dogmatism		7.84	1,20	-.53
HFT		.62 n.s.	1,20	.17
Dogmatism X HFT		10.69***	1, 20	.59
Full Model	.44	5.14**	3, 20	

*P < .025
**P < .01
***P < .005

Table 6

Year Two Sample Full Model Results for the
Criterion Professional Competence Peer Judgements, N = 26

Predictor	R^2	F	df	Partial R
Dogmatism		.06 n.s.	1, 22	-.05
HFT		1.69 n.s.	1, 22	.28
Dogmatism X HFT		4.80*	1, 22	.42
Full Model	.21	1.92	3, 22	

*P < .05

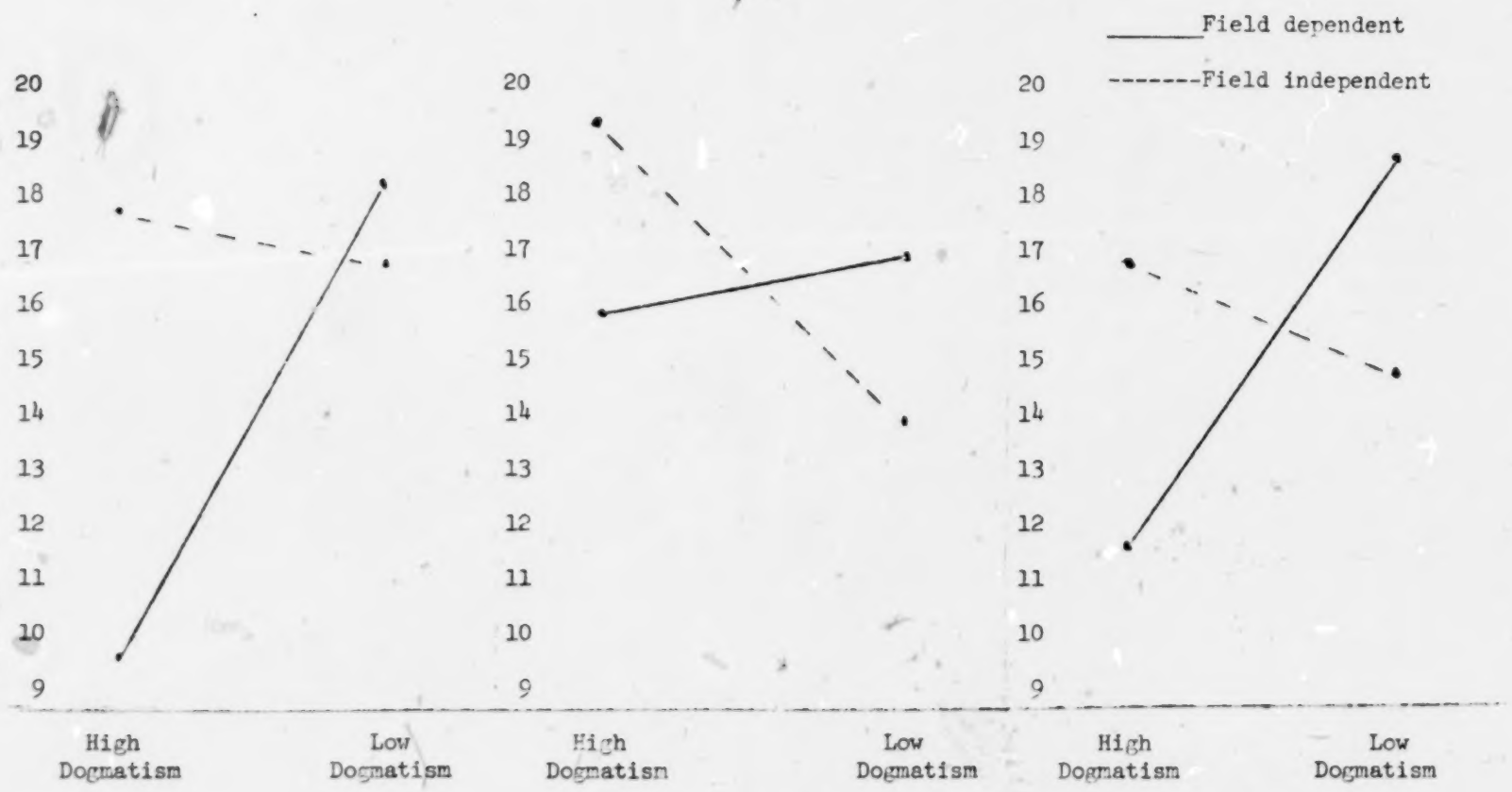

Figure 1 Median split raw score cell means of two samples, separate and combined, for the criterion peer judgement of professional competence

Table 7

Means and Standard Deviations for HFT and DS
by Year One and Two

Variable	Year one means	SD	Year two means	SD	t
Dogmatism	112.04	25.55	96.04	19.68	2.42**
HFT	9.68	5.74	13.05	7.07	1.82*

*P < .05, one tailed test
**P < .01, one tailed test